

No 102

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On 350 Market

Useful as a practical Essay in favour of Emmet's
to cure Salivagen - The Emmet's point may, or
not, be correct Inaugural Essay

On

Mercurial Salivation

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for

the degree of Doctor of Medicine

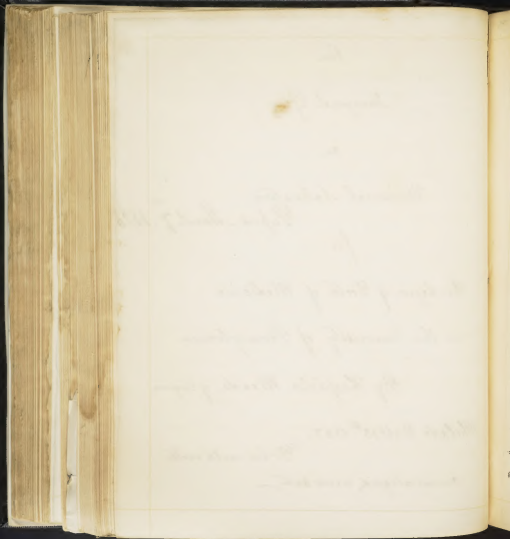
in the University of Pennsylvania

By Theophilus Meade of Virginia

Philad^a Novr 13th 1827.

"De hoc multi multa,

omnis aliquid, nemo satis, —



On Mercurial Salivation.

Mercury as a valuable medicinal article is so universally known and admitted that it would be superfluous in an essay like the one I am now entering upon to treat of its virtues. But notwithstanding the acknowledged fact of its highly medicinal efficacy, it is known to be such a powerful agent as to induce occasionally very bad effects in the system. Of these effects generally it is not my purpose to treat, as my wish is to confine myself chiefly to that diseased effect of the mineral commonly called salivation.—

Mercurial salivation may be defined that morbid increased secretion of saliva with soreness and ulceration of the gums, mouth, and throat, produced by mercury.—

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The disease occurs in all constitutions and may take place in a very short time after the commencement of the use of the mercury, or it may not show itself for several days or weeks. Dr. James Hamilton relates a case of salivation which did not appear until the expiration of four years after the use of the blue pill for a fortnight. The gums in this case were but slightly touched during the exhibition of the pill and it was not until the end of the time mentioned that a violent salivation ensued. - No mercury had been given in the interval and the patient enjoyed for the time good health.

Generally the disease appears during or a very short time after the exhibition of the mercury and after a perfect cure, never appears again until fresh mercury has been given. But after very violent cases of the disease, it is apt to return on exposure to bad weather if

care be not taken to cure it radically before
 permitting the patient to resume his former habits
 of life. I know myself, a young lady who was vio-
 -lently salivated during the spring of 1826 and
 apparently recovered perfectly, but on much ex-
 -posure to a cold and damp atmosphere she
 becomes troubled with a slight return of the
 disease -

The disease of the mercury is supposed
 to remain dormant in the system in such cases
 until called into play by some of its exciting causes -

Mercurial salivation does not always
 depend upon the quantity of the mercury exhibited,
 for very small quantities sometimes induce the dis-
 -ease as speedily as large ones. This is owing to some
 peculiarity of the patient's constitution. Some
 constitutions can bear enormous quantities of mer-
 -cury without suffering in the least from its
 morbid influence, whilst others suffer very much

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from the slightest dose. —

Exciting Causes. — The causes tending to excite or to aggravate mercurial salivation after its excitation are exposure to cold and moisture, the use of spirituous liquors and stimulating articles of diet. A full habit also by keeping ^{up} the inflammatory diathesis aggravates it in a great degree. —

Symptoms. — At whatever period the disease takes place after the use of mercury, it discovers itself by a slight dryness and heat about the mouth, a hoarse taste and tenderness of the gums. An increased secretion of saliva soon follows and the breath becomes fetid. In some cases the face swells enormously, the mouth and throat take on violent inflammation and ulceration, the tongue enlarges and protrudes beyond the teeth, the gums ulcers, bleed profusely and slough, and the inside of

the cheeks and lips sometimes put on a deep
cherry red colour in spots which rapidly pro=
=ceed to gangrene. The pulse is quick and dis=
=tinct and the patient extremely restless. The
inflammation about the mouth and throat
is often extremely painful and annoying even
before the commencement of the ulcerative
process. —

Dr Richard Field formerly of Petersburg,
Virginia and perhaps well known by some of
the professors of this Institution, has been in
the habit of late of distinguishing four species
of mercurial inflammation. —

In the first a
general inflammatory action takes place giving
the mouth, tongue, throat and the insides of
the cheeks and lips a deep red colour.

In the second
an aphthous crust appears on the fauces the



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ura and sides of the tongue.

The third species occurs in worn out constitutions. The mouth takes on a general inflammation and an ulcer resembling in colour the inside of the mouth of a fish seizes on the angles of the jaw and spreads to the adjoining parts.

In the fourth and last species a black speck about the size of a pea is first seen between the under lip and gums which soon sloughs off.

Dr. Leild met with a case of this last description in a boy, about ten years of age, from a single dose of Calomel. After the slough took place, gangrene commenced through out the gums in the fore part of the mouth and the inside of the under lip soon began to put an appearance of the same condition. It would be well to



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mention here that this case was effectually
cured by one or two emetics assisted by
mild astringent washes for the mouth. -

The different
species of inflammation mentioned above,
never require a different treatment, but
may be managed by one and the same
method. -

Diagnosis. - A mercurial ulcerated
throat has been mistaken for the ulcer of the
cynanche tonsillaris and treated accordingly. -
The patient had taken calomel previous to
the call of the physician and the family
with which he lived being fearful of having
done wrong in giving him the medicine
concealed the fact until the physician
discovered from the mercurial fector that
mercury had been given him. The peculiar
fector therefore which results from the action



of mercury in the mouth and throat will serve as a good characteristic mark of the mercurial affections of these parts. It is also possible to mistake a mercurial ulcer in the throat for a syphilitic one. These two ulcers however may be distinguished by the mark just mentioned and the history of the case.

Treatment. — the chief part of the treatment I would recommend in inordinate salivations, consists in the exhibition of emetics. This practice was accidentally discovered by Dr R. Heild to whom I have before referred. He had a patient labouring under hemorrhage from the bowels brought on by the excessive action of calomel, to whom he gave combinations of Spessac, Opium and Sugar of Lead for the purpose of suppressing it. The medicine was urged to such



an extent as to vomit the patient exhausted -
each was very irritable and soon at the same
time was violently salivated. The Doctor observed
a great change for the better in the condition
of the mouth very soon after the effort at
puking, and believing that it was owing to
the emetic, he determined to give the medi-
-cine a fair trial as soon as circumstances
would permit. -

Having a very extensive range
of practice he soon met with a number of
opportunities to try the virtue of emetics under
such circumstances, which he did to the full
confirmation of his belief. -

Many other highly
respectable practitioners of Virginia, after nu-
-merous trials with emetics in severe cases of
salivation, speak now so warmly in their
favour that their use has become almost



universal in the south-eastern section of the
state.

Dr. Seild being called to a patient labour-
ing under a severe salivation, directs an
emetic to be given and the stomach to
be washed out with Camomile tea. The
evening is his favourite time for exhibiting
the emetic, which generally procures the
patient a comfortable night's rest. In cases
of great emergency he directs as many as
three emetics during the day which he never
knew to fail arresting the salivation of
they succeeded in puking the patient.

From the
great success he has uniformly met with
from emetics in violent salivations, Dr. Seild
thinks they never would fail if timely re-
sorted to and pushed far enough. They arrest
the hemorrhage which sometimes proceeds from



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the mouth, cheek gangrene, reduce the swell-
-ling of the face and tongue, lessen the in-
-flammation of the affected parts and allay
general irritability in such a manner as to pro-
-cure ease and quiet for the patient. -

The follow-
-ing case which was furnished me by Dr.
John Keil, another eminent practitioner of
Virginia and a graduate of this University,
will show very obviously the advantages
of emetics in these cases. - "I directed ten
grains of calomel to be given at bed time
two nights in succession, to be purged off
each succeeding morning actively with salts
and magnesia. The calomel was exhibited
as above directed, but the friends of the
patient omitted giving the salts and mag-
-nesia. There was no operation from the
two doses of calomel for three days. The



third day I was called to the patient - the face
 and head were swelled to an enormous size, so
 as scarcely to discover the nose and eyes - the
 inside of the lips and gums was of a dark
 red colour - there was an oozing of blood
 from the mouth and what little I could
 see of the tongue was black. The mouth
 was very painful and offensive and deglu-
 -tition very difficult. I apprehended the patient
 would die from mortification speedily, if
 the usual treatment to arrest the salivation
 was observed. - I had heard of the cure of
 emetics in such cases by Dr. Keil of Helm-
 burg. I therefore ordered 2 grs of Sant. Aro-
 -matico and 20 grs of ipecac, which was taken
 with great difficulty. In the course of a short
 time it operated five or six times copiously,
 discharging each time a large quantity of
 thick tough phlegm. The stomach was



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washed out with camomile tea. After the op-
-eration of the emetic I ordered the bowels
to be opened that evening with salts. The next
day I visited the patient. she was very much
relieved - swelling much reduced - appearance
of the mouth improved - not much fetor
and swallowing performed with more ease.
I ordered the emetic to be repeated, to be
followed by a dose of salts; and astringent
washes for the mouth in a short time
completed the cure. -

In some cases of saliv-
-ation a bullet like tumour may be observed
in one of the cheeks very much inflamed
and apt to run very speedily into mortifica-
-tion. Dr Strachan of Petersburg, thinks
that emetics are of no avail in such cases.
But Dr Seild during the last summer
had a patient with this bullet like tumour



whom he cured with emetics very effectually.

D. Sindy of Ohio has lately recommended nauseating doses of emetics for salivation, but the practitioners of the south are decidedly in favour of puking.

Besides puking, the patient in low-els should be kept soluble with salts or castor oil, which should be given in the morning on an empty stomach. His mouth should be carefully cleaned three or four times a day with some mild antiseptic wash, such as an infusion of rose leaves or of sage, sweetened with honey, to which a little borax may be added.

The *Capsicum annuum* used as a gargle, is an article of high standing, in the south for mercurial affections of the mouth



and throat. It acts I suppose on the principle of a blister in exciting local inflammation. -

Besides the local remedies mentioned, several others are sometimes used, among which may be enumerated the infusion of bark or of galls, lime water, sugar of lead and the diluted mineral acids. -

Opium is sometimes given to relieve pain and to check the discharge. -

But of all the remedies used for inordinate salivation, emetics, in the southern part of Virginia, occupy by far the highest rank. In the course of a conversation with Dr. Child on the great advantages to be derived from them, he mentioned that he had seen several cases of violent



salivation terminate fatally previous to the use of emetics in their case, which, he firmly believed, might have been effectually remedied by them. To this belief he was led by having, since seen several cases successfully treated with emetics under precisely similar circumstances. —

On what principle emetics act in relieving mercurial salivation has never been so far as my information goes, exactly explained. It is not my purpose to attempt a positive explanation of their *modus operandi* in these cases, but as all suggestions in medical science are considered of some importance, I will make one or two on this part of my subject, with the hope, that if they prove lame and defective, they may be considered as suggestions only. —



It is well known that the stomach sympathizes with nearly the whole system. That there is a very great sympathy between it, the mouth, fauces and salivary glands, seems to be evident from the fact of a nauseating dose of an emetic when taken into the stomach, increasing the discharge of saliva and relaxing the vessels of the mouth. In this case the stomach is primarily operated on by the nauseating dose and the mouth, fauces, and salivary glands are affected secondarily through the medium of sympathy. A full dose of an emetic would have the same effect but in a greater degree. Another fact also which tends to prove the sympathetic connection between the stomach and the parts mentioned, is, that a vomiting may be excited by tickling the internal fauces with a feather, or



by rubbing tartar emetic on them and the
root of the tongue. When we consider too,
that the mucous coat of the stomach is
a continuation of that which lines the
mouth, pharynx and oesophagus, it becomes
a matter of no surprise whatever that there
should be such a great sympathy between
these parts. —

Now in cases of mercurial saliv-
-ation, I suppose that the mercury makes
its peculiar impression first upon the
stomach and afterwards through the medi-
-um of sympathy, the mouth, fauces &c, soon-
-er or later receive this peculiar mercurial
impression, which becomes modified by the
difference in the structure and office of
the parts. Such a supposition I think may
be reasonably made when mercury is internally
exhibited.



In cases of calivation from the external application of mercury, the stomach (even if it is not first affected) from its great sympathy with the mouth, fauces and salivary glands, may take on a condition, similar to the one it receives when mercury is internally given, which serves to keep up the irritation in the mouth, fauces and other parts. That the stomach does become affected under such circumstances, is corroborated by the facts of the irritable state of that organ and the great loss of appetite sustained in severe cases of the mercurial disease brought on by repeated mercurial frictions. In the slighter cases however the stomach is not so obviously affected, but may take on a latent morbid condition dependent upon mercury and calculated in some



degree to keep up its morbid irritation in the mouth. The stomach being we may say the seat of life itself, possesses great conservative powers, and hence its apparent little participation in the slightest forms of the mercurial disease. —

The stomach then I suppose to be intimately concerned in inordinate salivations, and that it takes on a latent morbid condition which serves to keep up the irritation in the mouth and throat. This condition I suppose to be altered by the operation of an emetic and one of a healthy nature supervenes, which through the medium of sympathy is extended to the mouth and throat. Hence we in some measure account for the healing disposition that the ulcers in these parts assume after the



operation of emetics.

But I would not confine the curative action of emetics in salivation, to the alteration of the condition of the stomach alone. We know they have a great effect in equalizing the circulation and promoting absorption. In salivation the mouth, the fauces or the salivary glands are very much inflamed, sometimes extremely painful and their vessels much congested. There is a determination of blood to the affected parts in all local inflammations, giving rise to congestion, swelling and their consequences. Now after the operation of the emetic in cases of salivation, the circulation becoming more equalized, the determination of blood to the affected parts is not so great as before, which is a circumstance strongly favouring the cure of all local inflam-



= mations.

Absorption also is promoted by the emetic and the congested vessels be-
= coming, in this way, disengaged, leave the
parts, ^{up} swollen and painful.

Perhaps the acrid mercurial saliva which it is possible for the patient to swallow during imperfect sleep, may serve in some degree to keep up the local irritation, and emetics by emptying the stomach of this may there-
= by assist the cure. —

I have now finished what I had to say on mercurial salivation, and al-
= though I am confident of not having done that justice to the subject which its importance demands, I hope to meet with the indulgence of those to whose ser-
= vicing I cheerfully though diffidently sub-

= mit this essay. the productions of a comparatively undisciplined mind, can not but appear trifling when viewed through the medium of talents, deep research and philosophical study. Thus, mine must appear when viewed by the Professors of the Pennsylvania University. —

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